

## **Amendment to the Claims:**

Claims 1-23 (Canceled).

24. (Currently amended) A transgenic mouse whose genome is homozygous for ~~comprises a null~~ endogenous transmembrane tryptase (mTMT) allele, ~~said allele comprising the sequence of SEQ ID NO:1,~~ said null allele comprising exogenous DNA, said transgenic mouse exhibiting, relative to a wild-type control mouse, at least one of the following: decreased body weight; decreased thymus weight; decreased thymus weight to body weight ratio; or increased pre-pulse inhibition.
25. (Currently amended) The transgenic mouse of claim 24-40, wherein the decreased body weight is a decrease of about 20% in female transgenic mice, relative to female wild-type mice.
26. (Currently amended) The transgenic mouse of claim 24-40, wherein the decreased body weight is a decrease of about 15% in male transgenic mice, relative to male wild-type mice.

Claim 27 (Canceled).

28. (Currently Amended) A cell or tissue isolated from the transgenic mouse of claim 24-35.
29. (Currently Amended) A method of producing the ~~a~~ transgenic mouse of claim 24, the method comprising:
- (a) providing a mouse embryonic stem cell comprising a disruption in an endogenous mTMT allele; and
  - (b) introducing the mouse embryonic stem cell into a blastocyst;
  - (c) introducing the blastocyst into a pseudopregnant mouse, wherein ~~the pseudopregnant mouse gives birth to~~ generates a chimeric mouse;
  - (d) selecting chimeric mice to breed to produce the transgenic mouse; and
  - (e) breeding the chimeric mouse to produce the transgenic mouse.
30. (Currently Amended) A targeting construct comprising:
- (a) a first polynucleotide sequence homologous to a first region of a transmembrane tryptase (mTMT) gene;

- (b) a second polynucleotide sequence homologous to a second region of the mTMT gene;  
and
- (c) a gene encoding a selectable marker located between the first polynucleotide sequence and the second polynucleotide sequence,
- (d) wherein the targeting construct when introduced into a murine embryonic stem cell, will produceintroduce a disruption in annull mTMT allele, wherein a transgenic mouse whose genome comprises said null allele exhibits, relative to a wild-type control mouse, at least one of the following: decreased body weight; decreased thymus weight; decreased thymus weight to body weight ratio; or increased pre-pulse inhibition.

Claim 31 (Canceled).

- 32. (Currently amended) A mouse embryonic stem cell whose genome comprises a null endogenous mTMT allele, said cell transformed with the targeting construct of claim 30.

Claim 33-35 (Canceled).

- 36. (Previously presented) The transgenic mouse of claim 24 wherein said exogenous DNA comprises a gene encoding a selection marker.
- 37. (Currently amended) The transgenic mouse of claim 36-35 wherein said gene is a neomycin resistant gene.
- 38. (Previously presented) The transgenic mouse of claim 24 wherein said exogenous DNA comprises a gene encoding a visible marker.
- 39. (Currently amended) The transgenic mouse of claim 38-37 wherein said DNA comprises lacZ.

Claim 40 (Canceled).